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| 10/029,288 | 12/28/2001 | You Sung Kang | P67500US0 | 3114 |

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| EXAMINER |
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ANYA, CHARLES E

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| ART UNIT | PAPER NUMBER |
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2194

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,288

Applicant(s)

KANG ET AL.

Examiner

Charles E. Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,7,9,10 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7,9,10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. Claims 1,3,4,7,9,10 and 13-16 are pending in this application.

Claim Objections

2. Claims 1,3 and 4 are objected to because of the following informalities:

Claim 1 appears to include typographical error. Specifically, lines 24 and 25 of claims 1 and 7 includes "smart cart" that seems to have been used in error.

For the purpose of this office action the Examiner would change "smart cart" to "smart card".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1 and 7 are rejected under 35 U.S.C. 103(a) a. being unpatentable over applicant's admitted prior art (hereinafter referred to as AAPA pages 2-3) in view of U.S. Pat. No. 6,564,995 B1 to Montgomery.**

5. As to claim 1, AAPA teaches a method of setting a communication environment between a mobile terminal and a smart card using a layered architecture of a protocol

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stack, the system comprising: if the mobile terminal provides power to the smart card, sending an answer-to-reset signal from the smart card to the to the mobile terminal (page 2 lines 8 - 14); determining whether or not the received answer-to-reset signal complies with an answer-to-reset signal pattern required by the mobile terminal (page 2 lines 16 - 21); if the received answer-to-reset signal complies with an answer-to-reset signal pattern required by the mobile terminal, analyzing the answer-to-reset signal transferred from the smart card to establish a communication environment (Step S104 page 2 lines 20 - 24); if the optimum communication environment is established, sending a command for requesting to open a logical channel to the smart card/opening the logical channel in response to the command for requesting to open the logical channel received from the mobile terminal, and sending a signal responding to the command to the mobile terminal (Step S105 page 2 lines 26 - 28, page 3 lines 1 - 2); and opening the logical channel to be used in the application to secure a communication channel between the smart card and the mobile terminal (Step S106 page 3 lines 7 - 8); wherein if the optimum communication environment is not established, the mobile terminal sends a protocol/parameter selecting request to the smart card and the smart card responds if the protocol and parameter are supported otherwise, the smart card enters a standby mode to receive a reset command (page 2 lines 20 - 28), wherein the answer-to-reset signal transferred from the smart card comprises at least one of a communication speed and a communication protocol, which are supported by the smart card itself (page 2 lines 13 - 15) and a plurality of

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communication speed and protocols the corresponds to each application (page 3 lines 1 – 27).

AAPA is silent with reference to the smart card that supports a plurality of applications.

Montgomery teaches the smart card that supports a plurality of applications (figures 2-6 Columns 3-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Montgomery and AAPA because the teaching of Montgomery improve the system of AAPA by providing a process for flexibly and easily selecting one of several applications on a multi-application smart card and maintaining compatibility with existing installed base of conventional smart card terminals (Col. 2 Ln. 44 – 48).

6. As to claim 7, see the rejection of claim 1 above.

7. Claims 3,4,9,10 and 13-16 are rejected under 35 U.S.C. 103(a) a. being unpatentable over applicant's admitted prior art (hereinafter referred to as AAPA pages 2-3) in view of U.S. Pat. No. 6,564,995 B1 to Montgomery as applied to claim 1, and further in view of U.S. Pub. No. 20010024006 A1 to Fu et al.

8. As to claim 3, Montgomery and AAPA are silent with reference to the method as claimed in claim 1, in the determining step, if he received answer-to-reset signal does

not comply with an answer-to-reset signal pattern required by the mobile terminal, the method further comprising the steps of: determining whether or not a process of a protocol and parameters selection is executed in the mobile terminal; if the mobile terminal executes the process of the protocol and parameters selections and sending a command for requesting to select the protocol and parameters to the smart card

Fu teaches the method as claimed in claim 1, in the determining step, if he received answer-to-reset signal does not comply with an answer-to-reset signal pattern required by the mobile terminal (figure 4 Step 402 page 4 paragraph 0071), the method further comprising the steps of: determining whether or not a process of a protocol and parameters selection is executed in the mobile terminal (figure 4 Step 404 page 4 paragraphs 0071/0072); if the mobile terminal executes the process of the protocol and parameters selections, sending a command for requesting to select the protocol and parameters to the smart card (figure 4 Step 406410 page 4 paragraph 0072).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Fu, Montgomery and AAPA because the teaching of Fu improve the system of Montgomery and AAPA by providing applications related sub-layer that masks the difference between API sets within the smart card related layer and details of the smart card (Fu page 5 paragraph 0098).

9. As to claim 4, Fu teaches the method as claimed in claim 1, wherein the smart card and the mobile terminal comprise a transmission layer for transmitting and receiving a data, and an application layer for processing the data, respectively (figure 2,

page 2 paragraph 0048, figure 6 page 5 paragraphs 0098/0099); wherein the application layer of the smart card and the mobile terminal includes a plurality of applications, and the transmission layer of the smart card and the mobile terminal includes a plurality of communication environments capable of supporting the plurality of applications of the application layer (figure 2 (applications), page 4 paragraphs 0070, page 5 paragraph 0095); and the transmission layer and the application layer are independently embodied to each other, so that one application supported by a plurality of communication protocols and one communication protocol supports a plurality of applications (figure 2, page 4 paragraph 0070/0072/0073/0074, page 5 paragraph 0095).

10. As to claims 9 and 10, see the rejection of claims 3 and 4 respectively.

11. As to claims 13 and 14, see the rejection of claims 1 and 4.

12. As to claim 15, Fu teaches the method as claimed in claim 1, in the determining step, if he received answer-to-reset signal does not comply with an answer-to-reset signal pattern required by the mobile terminal (figure 4 Step 402 page 4 paragraph 0071), the method further comprising: determining whether the process of the protocol and parameters selections is supported by the smart card, which receives the command for requesting to select the protocol and parameters from the mobile terminal (figure 4 Step 406/410 page 4 paragraph 0072); and if the smart card supports the protocol and

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parameters selection, sending a signal responding to the command for requesting to select the protocol and parameters to the mobile terminal to ensure the communication channel between the smart card and the mobile terminal (figure 4 Step 406-410 page 4 paragraph 0072).

13. As to claim 16, see the rejection of claim 15 above.

Response to Arguments

14. Applicant's arguments with respect to claims 1,3,4,7,9,10 and 13-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 5,923,759 to Lee: directed to system for securely exchanging data with smart cards.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-Ai can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Charles E Anya

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Examiner
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